MINUTES

MONTANA SENATE
59th LEGISLATURE - REGULAR SESSION

COMMITTEE ON ENERGY AND TELECOMMUNICATIONS

Call to Order: By **CHAIRMAN KEN TOOLE,** on March 10, 2005 at 3:00 P.M., in Room 303 Capitol.

ROLL CALL

Members Present:
Sen. Ken Toole, Chairman (D)
Sen. Brent R. Cromley (D)
Sen. Aubyn Curtiss (R)
Sen. Jeff Essmann (R)
Sen. Dan Harrington (D)
Sen. Dave Lewis (R)
Sen. Greg Lind (D)
Sen. Dan McGee (R)
Sen. Gary L. Perry (R)
Sen. Glenn Roush (D)
Sen. Carol Williams (D)

Members Excused: None.

Members Absent: None.

Staff Present: Casey Barrs, Legislative Branch
Claudia Johnson, Committee Secretary

Please Note. These are summary minutes. Testimony and discussion are paraphrased and condensed.

Committee Business Summary:
Hearing & Date Posted: None.
Executive Action: None.

INFORMATIONAL HEARING

Larry Nordell, Economist, Montana Consumer Council (MCC), distributed a handout on his PowerPoint presentation. He went through the presentation giving grid history and background. He discussed grid management and its access. He talked about results of actual loads (transmission), and its path. He explained what a typical loading curve is, and its capacity. He discussed expansion of high voltage lines, and how expensive it is. He talked about the efforts of putting the grid back under regional management to make the grid more efficient. He talked about the RTO expansion and how the RTO has to receive authority to expand. He discussed the activity and interest from resource developers, and proposals for alternate funding and state bonding. He talked about the concerns in the efficiency of expansion to balance generators and consumer. He gave an example of unintended consequences of removing the oversight. As utilities grew, they found they could interconnect the grids, which would make power cheaper. He informed the Committee that the largest connection in the west is from Colstrip, and the cost is over $1.5 million a mile. He said that Montana has not built a transmission line since the 1980s. He added that accessing sites is difficult because they have to purchase siting permits from the many landowners the. He showed the loading curve for Montana, and added that it is the largest in the northwest. He discussed the problems they have with the current electrical generation. He said the congestion has overloaded the lines, because the lines are over 100 years old. He stated that the first lines that were built are in Great Falls.

{Tape: 1; Side: B}

EXHIBIT(ens53a01)
EXHIBIT(ens53a02)

Brian Silverstein, Acting VP for Bonneville Power Administration (BPA), Vancouver, Washington, distributed a handout which he presented by PowerPoint. He gave an overview of the transmission activities and accomplishments in Montana and the Northwest. He stated that the BPA owns and operates 75 percent of the Northwest's high voltage electric grid. It includes Wyoming, Utah, Nevada, California, Oregon, Washington, Idaho, and eastern Montana. He discussed BPA operating under the Federal Energy Regulatory Commission (FERC), but in most cases, they are not subject to its jurisdiction. The BPA complies with the FERC as a policy choice under the "Open Access Transmission Tariff". He talked about the BPA providing non-discriminatory open access transmission tariffs since the rules from the FERC went into

effect in 1996. He discussed the status of the BPA infrastructure additions as shown on the PowerPoint handout. He discussed the BPA interconnection from Canada, California, and back to Idaho and Montana. He stated these were some of the constraints that were taking place back in 1994. He discussed the coal generation in Montana being used by consumers, then the excess was marketed to California, and the Northwest. He talked about the transmissions operating at its full capacity when California and other states were using Montana energy. He discussed the benefits of sharing reserves and backing up other power companies in case other major generating plants are at full capacity. He added this has provided major economic opportunities, and has added even environmental benefits by reducing the need to run thermal generating plants, because of the way they can move hydro around to the various plants. He showed on the map the changes that have taken place from 1991 to 2001. He talked about the changes in hydro operations under the Endangered Species Act. He added that the hydro projects are being operated differently now then in the 1990s, when the power systems were trying to mitigate the impact of the power systems on fish, such as; salmon. The changes in operation that took place were not what the grids had been designed for, and the reason for the change patterns in hydro grid projects, because the transmission system was being restrained. He talked about the wholesale market place that began in 1996, the Energy Policy Act, and federal legislation from 1992, then the FERC rules that provided ultimate access, which required transmission plants to make their systems available to all interested parties for the use of transaction grids. He discussed the changes in the wholesale market place in world economy aluminum. He said when the Columbia Falls Aluminum, and the Spokane Aluminum operations had shut down, the generations loads still generated at a very economic strength. He talked about the blackout in the Midwest to the eastern part of the United States in 2003. He said that a line had snagged into a tree which created two major events by setting off the whole Western energy connection crashing down. He said that consumers in seven states were without energy for nearly a day, and the cost to the western economy was approximately $2 billion. During the Northeast blackout of 2003 they calculated a loss of $10 billion. This limited the transmission plants in the amount of power that they can move on tap. The one place they were hit very hard was the path that moved power back east, and the interconnection to California. This meant that the BPA had to recapture the capabilities they had lost, which meant they had to change their way of recapturing energy, because of the lost of smelters, the change in fish operations, and the more stringent change in the liability criteria. He said after the Northeast blackout, the BPA started operating more safely, conservatively, and tried to determine the best investments that could be made. He talked about the

NorthWestern Energy problems, and how it placed limitations on the transmission system. He said the BPA went through a major infrastructure program in 2000 and 2001, when they began placing their capability back onto the grid. He talked about distribution centers, and placing generation in the load centers. He discussed how best to respond to demand, and its use on the transmission system. He discussed how the BPA is exploring programs, and finding opportunities to transfer transmission by looking at other alternative measures. He talked about transmission adequacy guidelines that will be drafted by September 2005, with regional review and approval by December 31, 2005.

Mr. Silverstein talked about the accomplishments of the BPA. He said it has been over 15 years ago since the BPA has built a major transmission line until the one they built several years ago. Over a 40-year period, the BPA has invested over $1 billion in the transmission infrastructure.

{Tape: 2; Side: A}

He informed the Committee that the BPA has installed a major transmission line from Spokane to Coulee Dam that has restored the interconnection for the path from Montana to other western states. He talked about promoting renewable generation, and how BPA is committed to the support of renewable resources, and especially in wind. There are some wind farms, but recent state and federal activities are driving new projects. He stated by the end of 2005, that wind connected to the BPA grid could more than triple, and that number could double again by 2006. He talked about the two major costs of building a generating plant. One is the cost to connect the plant with the grid lines, and the other is the cost to buy transmission service, and move it from the generator to the purchaser. He discussed the Northwest Transmission Assessment Committee (ENTAC), a group from the Northwest power pool that is doing some high level study. One is a study on Montana to the Northwest. The second one is a study to build a new substation along existing lines. He said the initial draft on these studies should be done very soon. The study is being done by volunteer labors from utilities, such as; Bonneville, and NorthWestern Energy. **Mr. Silverstein** discussed one of the studies under ENTAC, who is looking at transmission system from Canada to the Northwest to California. He said that Northern Lights Energy is working on a proposed project from northern Alberta, Canada, and export that energy to the United States. A new proposal is a route from Canada down through Montana, around the Townsend area, then down through Idaho, and to Las Vegas. He discussed mandatory enforceable reliability standards, and how they should be applied to all utilities,

independent power producers, and all people that are part of the electricity grid.

Brian Silverstein and the Committee discussed the BPA commitments, and moving power throughout the Northwest. **Mr. Silverstein** informed the Committee that the Northwest system is different then California and the Northeast system.

SEN. CURTISS asked about hindrances in having benefits in a overall system operator. **Mr. Silverstein** said there are two major issues, and that is; fear of change, and a fear of costs.

{Tape: 2; Side: B}

Mr. Silverstein informed the Committee how a lot of Montana's energy goes to Washington. He told the Committee there are two restraints that the BPA has to deal with. One is the east to west constraint in moving power in the winter time, and north to south in the summer time for irrigations. He said that imports are an issue with the BPA, but they are trying to respond to anyone that request service. He said the process is simple, first come, first serve. If that person has the capability, the BPA will offer them a transmission contract. If a grid needs to be fixed, they show the agreement to the customer, and inform them that it needs to be fixed, and they have to pay for it. In exchange for this, the BPA gives them credit for future transmission use.

He talked about placing generators where the load is the heaviest; such as, industrial plants. He said that even combustion turbines may be used at larger plants. This reduces the need for transmission. He said it could lessen the load by 55 watts that a plant wouldn't have to carry over the transmission lines. He said as a transmission provider, such as the BPA, should be willing to make a payment for any of these technologies that these firms want to invest in.

SEN. PERRY asked if **Mr. Silverstein** if he sees microwave energy transmission for the future. **Mr. Silverstein** replied that when so much power is moved through a beam, it will be cut like a cell phone. He said he doesn't see this being used. He said there are new conductors that are being designed that will make more efficient use of moving energy. He talked about different materials that are being considered that will help manage the grid, and keep it stable so the plants will be able to move more power over existing lines.

SEN. ESSMANN asked about excess generation, and transmission capability. He has heard that Wyoming is talking about building

a transmission plant to get some of their excess power to southern California. **Mr. Silverstein** said existing plants on a grid are probably not too constrained on transmission, which is available most of the year. He said the problem is, when people want to develop and exploit a new capability; such as, coal, wind, or gas, it will create more transmission to be used. Transmission is very expensive, and the plants will need to know who will make the investment, and how do they recover those costs when that investment is made.

{Tape: 3; Side: A}

CHAIRMAN TOOLE asked **Mr. Silverstein** about systems constraint and the small amount of hours, and if this is a predictable pattern. **Mr. Silverstein** replied, yes. He said that typically it is following a two peak system. He stated that the two peaks are generated in the morning when people are getting ready for work, and the second peak in the late afternoon. He said that the transmission system tries to follow this. He said it is odd that the transmission path for Montana in the Northwest is constrained at night. The reason for this, is that the volts coming into Montana present excess generation. He said this isn't very efficient or cost effective for Montana. He added that the coal plants need to continue running, and not shut down, because surplus power travels west in the night time, and is being stored as water in the hydro system.

Mr. Silverstein talked about disrupted hours. He said in the future that plants may be able to tell their consumers that 10 months out of the year, the transmission system is a firm market. Then the other two months could spike to 150 hours, and cause interruption.

CHAIRMAN TOOLE asked **Mr. Silverstein** if there has been any litigation dealing with Canada about gas NAFTA, trade issues, and especially with hydro state permitting process. **Mr. Silverstein** replied that he isn't aware of any situation with Canada.

ADJOURNMENT

Adjournment: 5:30 P.M.

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SEN. KEN TOOLE, Chairman

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CLAUDIA JOHNSON, Secretary

KT/cj

Additional Exhibits:

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